

which abortion then occurs? The various forms of hemorrhage met with in pregnancy, as epistaxis, hæmoptysis, metrorrhagia, and apoplexy, are likewise predisposed to by this hypertrophy, normal though it be. Although pregnancy may, in the majority of cases, suspend or render slower the progress of pulmonary consumption, the progress of this affection becomes accelerated after delivery, and the still hypertrophied heart increases the perturbation of the respiratory apparatus.—*Med. Times and Gaz.*, December 3, 1859, from *Archives Générales*, tome xiii.

45. *Inverted Uterus Replaced after a Lapse of nearly Twelve Months.*—Dr. CHARLES WEST reports (*Med. Times and Gaz.*, Oct. 29, 1859) the following case of this:—

A. A., aged 25, applied at the out-patients' room of St. Bartholomew's Hospital, August 27, 1854, when she gave the following history of herself:—

She had been married five years, and had given birth to two children, of whom the former was born after a natural labour two years and a half since; the second on October 16, 1858. The child in this instance also was born alive after an easy labour, but the placenta was retained for three and a half hours, during which time very great hemorrhage took place, and in consequence of it the patient became insensible, and was, therefore, unable to say whether it was eventually removed by hand, or expelled by the natural efforts. She was left by her labour in a state of such extreme weakness that she was quite unable to suckle her child; and suffered in addition from much pain in the abdomen and diarrhoea. These ailments confined her to bed; and at the end of five weeks phlegmasia dolens of the right leg came on, for which leeches were applied, and other treatment was adopted, until, at the expiration of seven weeks, she sought admission into the London Hospital, where she remained for a month, and left the hospital much benefited as far as that ailment was concerned.

Soon after leaving the hospital, and about three months after confinement, the menses first reappeared. From the first they were profuse, and intermingled with coagula; they lasted longer than natural, and returned more frequently, and for some time she had completely lost count as to when her periods were due, so frequent was their return, so almost constant their presence, while an abundant yellowish leucorrhœa appeared immediately on the cessation of the sanguineous discharge. The return of the hemorrhage compelled her on each occasion to keep her bed; but in spite of this precaution she had been reduced by it to a state of the most extreme exhaustion, her skin was sallow, her pulse very feeble, and very frequent, and she had the aspect of a patient suffering from advanced malignant disease.

On making a vaginal examination, a tumour of an oval form was discovered hanging down for about two inches and a half through the os uteri, which closely surrounded, but did not constrict it. Suspicion was raised as to its nature by finding that the pedicle of the tumour was of the same thickness as its extremity, and also by the fingers when passed up behind it encountering a *cul-de-sac*, as if the uterus, with the exception of its orifice, were inverted. Hemorrhage was not excited by the examination, but a rather abundant blood-stained purulent leucorrhœa. The patient was at once admitted into the hospital, and on the 29th the diagnosis was established by the following means:—

1st. The uterine sound carried round the pedicle of the tumour encountered resistance to its further passage all round at the distance of half an inch. The finger, though introduced easily behind the tumour, could not be passed in front of it, as the anterior lip was too closely in contact with it.

2d. The fingers introduced into the rectum could without much difficulty be carried above the fundus of the tumour, showing that the body felt per vaginam was not an out-growth from the uterus, but the uterus itself in an altered position.

3d. If while one hand was in the vagina the other was pressed firmly over the symphysis pubis; at first, no body was felt between the two hands. Pressure made against the tumour in the vagina, however, brought it before long within the grasp of the other hand, when it was possible, through the thin abdominal walls, not only to distinguish its contour, but even to perceive the

circular depression in its upper part which indicated the point of inversion of the womb.

Dr. Tyler Smith's case¹ suggested an imitation of his proceedings, and, accordingly, after efforts made with the hand by grasping and compressing the womb to restore its position, or at least to render it more yielding, an air-pessary was introduced into the vagina and inflated to as great an extent as the patient could bear. On the following morning the os uteri was found much more dilated, and its tissue much more yielding, so that the fingers could now be passed all round the tumour with ease, and everywhere discovered the inversion of the substance of the womb. Manipulation of the inverted uterus was repeated daily until the 5th of September, and the pessary was on each occasion reintroduced and re-inflated, with the exception of one day, on which it was discontinued, in order to obtain relief for the bowels.

It did not seem, however, that much was gained by the proceedings beyond that increased dilatation of the os which was obtained by the first introduction of the pessary. The vaginal walls, indeed, were rendered more yielding by the extension to which they had been subjected by the pessary, so that the whole uterus admitted of being pushed up in the pelvis more readily than before, but no change was effected in the relation of the inverted body itself. A very offensive leucorrhœa had been excited by the pessary, and its distension had occasioned a very painful stretching of the vagina; but in spite of this the patient's health was already much better than at the time of her admission; she had already gained strength, and her complexion had lost something of its sickly hue.

I now attempted to modify the instrument, and had a pessary constructed so as to expand at its upper third more than elsewhere, in order to avoid needless stretching of the vagina; while it was fitted, by means of a wire stem, to a girdle which encircled the body in order to obtain a fixed point from which the pressure should act; a condition altogether absent in the air-pessary as at first employed.

This was first tried on September 20, the patient having remained since the 5th without any attempts at the replacement of the organ. Some advantage seemed to be gained by the pessary thus modified. It retained its position well, and seemed to produce less discomfort, and to cause a less profuse and less offensive discharge. Still it did not appear to exert any influence on the uterus itself, its force being rather expended in stretching the vagina.

After a few days' trial, I accordingly removed it, and had another constructed of smaller dimensions, under the impression that if it were introduced within the os uteri and there inflated it was more likely to expand the uterine walls, and thus to replace the organ than by any mere pressure exerted from below upwards against the fundus of the womb. On October 3, this new apparatus was introduced for the first time, and though no effect was produced in the first twenty-four hours, it was reintroduced on the 4th, and allowed to remain for forty-eight hours in its position. On the 5th, the patient complained of a good deal of pain in the abdomen, though not of more than she had experienced on some former occasions; and it was with a feeling of glad surprise that, on the 6th, it was discovered that the organ had resumed its natural position.

The os uteri was widely open so as readily to admit two fingers, and its lips were much swollen, the uterine sound passed nearly three and a half inches, and the womb was now felt in its natural position by the hand placed over the pubes. The patient was kept quiet in bed, and, for the next twenty-four hours, the urine was drawn off by the catheter. On the 7th, the sound ascertained that the womb still retained its proper position. Menstruation came on on the evening of that day, and continued scantily until the 11th; and on the 13th, the sound discovered the uterus to have somewhat contracted, and now to measure scarcely three inches; and on the 18th, the patient left the hospital apparently in perfect health, and having walked about for some days without inconvenience.

Dr. West makes the following remarks on the best mode of employing the

¹ See number of this journal for July, 1858, p. 270.

air-pessary, which may be of use to those who hereafter meet with a similar case:—

"1st. Neither in this case nor in another which came under my care, some ten years ago, did any benefit appear to result from manipulation of the womb, or from any attempts with the hand to replace the organ, or to reduce its bulk. The utility of such endeavours will, I apprehend, be limited to instances of recent inversion, or to those exceptional cases in which the womb remains comparatively yielding and flaccid some weeks after the occurrence of the accident, as it appears to have done in those reported by Dr. Belcombe,¹ and Dr. Miller.²

"2d. Many inconveniences attend the employment of the common air-pessary, partly from the want of some fixed support to retain it in its place, and partly from the circumstance that the pressure it exerts being equal in all directions, a most painful distension of the vagina is inseparable from any attempt to exert efficient counter-pressure against the inverted womb.

"3d. This disadvantage may be easily overcome by means of a belt to fasten round the waist, the anterior half of which, made of steel, serves as a fixed point for a metallic wire, which is attached to a small wooden disk or cup that bears the pessary. The pessary itself, made of vulcanized India-rubber, and in this instance four inches long by five in circumference at its middle, was rendered comparatively inelastic at its lower half by the introduction of several layers of linen between the folds of the India-rubber, while no such material intervened to prevent the full expansion of its upper half when it was filled with air by means of the syringe through the elastic tube that was connected with it. By this means continued pressure was exercised against the fundus of the inverted uterus, without painful distension of the vagina.

"4th. I am uncertain as to the exact mode in which the replacement of the uterus is effected, and doubt whether it is due to the direct pressure of the pessary against the fundus of the uterus, so much as to the unfolding of the uterine wall by the instrument when introduced into the shallow *cul-de-sac* within the os uteri, formed by the still uninverted portion of the cervix. If this supposition be correct, one's endeavour in any future case would be, first, to introduce a small pessary within the os, in order to dilate the aperture, and to follow this up by the employment of one somewhat larger, with the view of thus unfolding the wall of the organ, rather than to force the fundus upwards by direct pressure against it."

MEDICAL JURISPRUDENCE AND TOXICOLOGY.

46. *Poisoning with Sulphocyanide of Potassium*.—Dr. SETSCHENOW, in a paper on this subject, supplies the following inferences as to the action of the sulphocyanide on animal bodies; in his experiments he used frogs as the animals to be operated on, except in one instance, when a rabbit was selected.

(a.) The sulphocyanide introduced into the stomach acts as a poison; causes decrease of the muscular irritability, and destroys life.

(b.) The sensibility of the skin in poisoning by sulphocyanide, either by introduction of the poison into the stomach by the mouth, or by injection of it under the skin, decreases more quickly than the motive power of the animal.

(c.) Brought into contact, in solution, with muscular structure, it does not produce direct paralysis of muscle.

(d.) The symptoms induced by this salt when introduced into the body, prove that the action of the poison is primarily exerted on the brain, then upon the spinal cord, and through these nerve centres on the organs of locomotion and sensation.

(e.) When the heart has ceased to beat, its action may be excited for a time

¹ Medical Times and Gazette, 1841, vol. vii. p. 783.

² Edinburgh Monthly Journal, December, 1851.